STRATCOM Overview & Analytic Challenges

Pat McKenna

Chief, Analysis Management

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- **Command Organization**
- **Analysis Goal**
- **General and Specific Analysis Areas**
- **Summary**

Evolution Of USSTRATCOM

- **Strategic Nuclear Mission**
  - Strategic Air Command (1946-1)
  - JSTPS (1960-1992)
  - Original USSTRATCOM (1992-2002)

- **Space**
  - Service space activities
 - USSPACECOM (1985-2002)

- **Fundamental Changes**
  - Cold War ends, rise of non-national entities
  - Global capabilities, global effects, global threats
  - Joint warfare with interagency capabilities

Providing Global Deterrence

- **Strategic Deterrence**
- **Space Operations**
- **Global C2**
- **Global Strike**
- **Information Operations**
- **Integrated Missile Defense**
- **Intelligence, Surveillance, Reconnaissance (ISR)**
- **Combating WMD**

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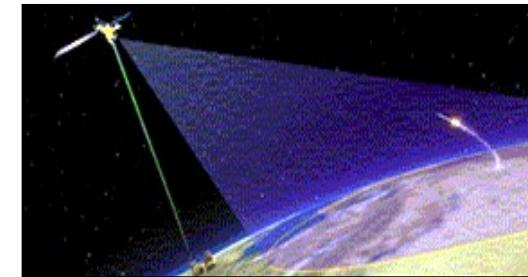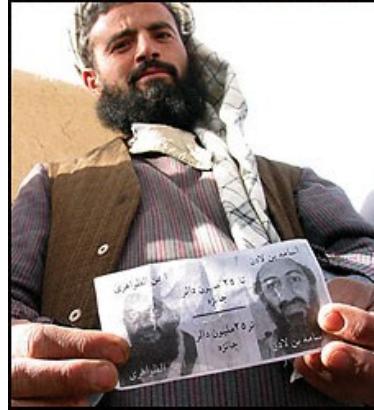
"**Provide the nation with global deterrence capabilities and synchronized DoD effects to combat adversary weapons of mass destruction worldwide. Enable decisive global kinetic and non-kinetic combat effects through the application and advocacy of integrated ISR, space and global strike operations, information operations, integrated missile defense and robust**

**Provide Global Capabilities to Geographic COCOMS**

Component Structure

```
                        HQ
                     USSTRATCOM

  USA Forces        USN Forces        AFFOR            USMC Forces
   (SMDC)            (CFFC)           STRIKE            (MCCDC)
  ARSTRAT                          ─────────────      MARFORSTRAT
                                     AFSTRAT –
                                      SPACE

 JFCC-IMD      JFCC-NW       JFCC-GSI        JFCC-SPACE     JFCC-ISR
 (Missile     (Network      ( Global Strike   (Space          (ISR)
 Defense)     Warfare)      and Integration) Operations)

Schriever AFB CO  Fort Meade MD  Offutt AFB NE  Vandenberg AFB CA  Bolling AFB DC

            JTF-GNO                JIOWC            SCC-WMD
          (Network Ops)        (Information     (Combating WMD)
                                Operations)
           Arlington VA        Lackland AFB TX   Fort Belvoir VA
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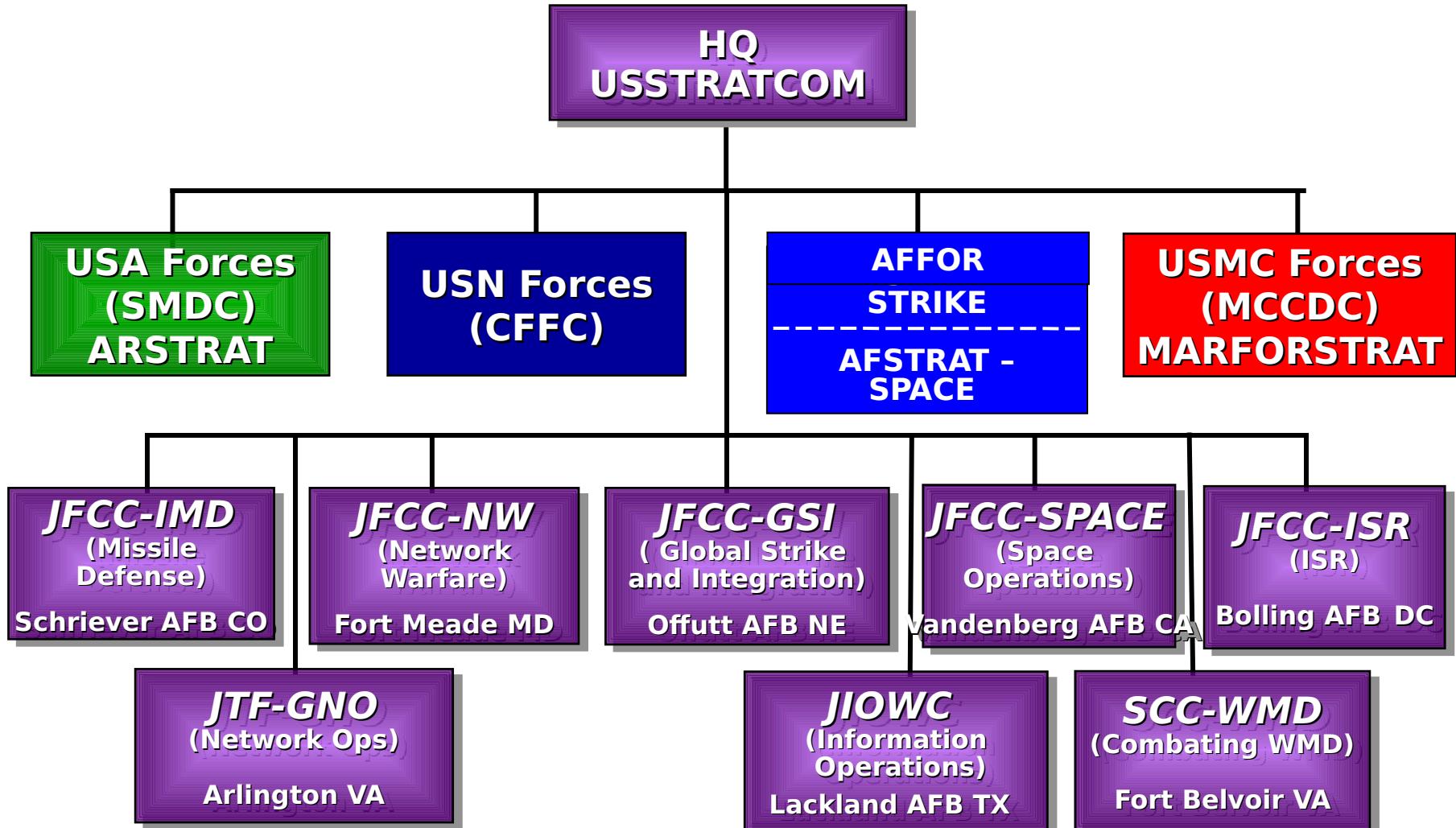
- **Mechanism to rapidly utilize world-class expertise to help solve our toughest problems and provide:**

  - **Unique global strategies**
  - **Timely courses of action**
  - **New operational tools and analyses**

SKIWeb

https://usstratcom.stratnets.stratcom.smil.mil/goc

Identify, analyze, and advocate for capabilities and resources to accomplish US Strategic Command's assigned missions of strategic deterrence, global strike, space operations, information operations, integrated missile defense, combating weapons of mass destruction, and global command, control, intelligence, surveillance and reconnaissance. **Develop and manage current and future year financial plans.**

- **Mission area capabilities & resources advocacy**

- **Mission area capabilities assessments (JCIDS process, SWARF, FCB engagement)**

- **Mission area capabilities resources analysis, program oversight (Congressional, OSD, Services influence), Budget Execution, Management Controls**

- **Future capabilities, concepts & experimentation (ACTD, SAG S&T, Scientific / RDT&E influence)**

- **Mission area analysis**

- **Enterprise and Mission area capabilities architectures**

J8
Dir Capability & Resource Integration
Mr. Kenneth S. Callicutt

J8A
Associate Director
Mr. John M. Gipson

J81
Acquisition Division
Col Chang/Ms Boyd

J82
Future Capabilities Division
Mr. Spencer/Mr. Gelenter

J83
Resource Management Division
Col Anthony/Mr. Herring

J84
Space & ISR Division
CAPT Olson/Mr. Coy

J85
Msl Defense/Combating WMD Div
Dr. Mark Gallagher/(Vacant)

J86
NETOPS/NETWAR Division
COL Gregory/Ms. Kelley

J87
Global Strike Capabilities Div
Mr. Colasacco/(Vacant)

- - - - **Operations Research Analyst Assigned**

- **Timely analysis products**

- **Sound based analysis products**

- **Analytic expertise to identify and evaluate capabilities within and across mission area analysis**

  - **In-house and/or leveraged external analysis capabilities**

Timely and sound analysis in and across all STRATCOM mission areas

Networking with Analytic Community

- **Joint Collaborative Analytic Council (JCAC) (meets bi-annually)**
  - **Joint analytic organizations**
- **Space Analysis Consortium (meets quarterly via VTC)**
  - **AFSPACE, AFSAA, NRO, NSSO, STRATCOM, SGS JFCC**
- **Held Analytic exchanges with DTRA/ASCO, AFSPACE, SMDC**
- **Data**
  - **Joint Data Support (JDS) - campaign model data files source**
  - **AMSAA - Army Material System Analysis Activity**
- **Professional Organizations**
  - **MORS, Army OR conf, AF OR conf, etc.**
- **Research Topics**
  - **NPGS, AFIT**

Goal
Leverage analytic community to improve analysis capabilities

Analytic Tools/Techniques

- **Analytic techniques**
  - **Systems Dynamics**
  - **Linear Programming**
  - **Multi-Attribute Decision Making, Value Focused Thinking**
  - **Statistics/Probability**
  - **Political Science approaches**
- **Campaign Models**
  - **Primary: JCIM, EADSIM, WAM**
  - **Secondary: ITEM, STORM/Thunder**
  - **Exploring: JAS (JWARS), COSMOS, SEAS, SPAAT**
  - **Issue: models do not represent all mission areas**

- **Command Capability List**
- **Internet Protocol Routing in Space**
- **Electronic Warfare assessment**
- **Campaign Modeling**
- **Integrated Net Assessment**
- **Integrated Planning Environment**
- **New TRIAD Analysis (approaches: system dynamics, LP, Bayesian)**
- **Integrated Nuclear Enterprise Model**

- **Conventional Trident Modification**
- **Integrated Tactical Warning/ Attack Assessment (ITW/AA)**
- **Architecture**
- **Strategic Deterrence Assessment Lab (SDAL)**
- **Threat Mapper**
- **C2 Studies and NC3 Assessment**
- **Combating WMD**

Areas and topics span

Social Science, Physical Science and Operations Research problem sets and techniques

- **Mitigating the risk of misinterpretation of launching a Conventional armed ICBM**
  - **Identify and analyze mitigation alternatives (technical, political, procedural, etc)**
  - **POC: Lt Col Wethor, HQ STRAT/J33, 402-232-5489**
- **Information Sharing with Allies**
  - **What are technical options to facilitate access to nets?**
  - **What options available to enhance information sharing?**
  - **POC: Mr. Kyriss, HQ STRAT/J51, 402-294-1035**
- **Organizational Relationships to facilitate persistent ISR**
  - **Identify and analyze organizational relationships to best meet persistent ISR COCOM requirements**
  - **POC: LCDR Hendrick, HQ STRAT/J51, 402-294-3958**

Specific Topics

- **Management of ISR Assets**
  - What is the most effective and efficient method of managing Title 10 and Title 50 assets?
  - POC: LCDR Hendrick, HQ STRAT/J51, 402-294-3958
- **Electronic Warfare and Network Warfare – Are they merging?**
  - Examine if disciplines are merging and how to improve capabilities within.
  - POC: Mr. Seyle, HQ STRAT/J39, 402-232-5198
- **Integration of Missile Warning and Missile Defense**
  - Perform critical analysis of missile warning systems and architectures (ITW/AA) and TES) and missile defense systems and architectures.
  - POC: Mr. John Alspaugh, HQ STRAT/JFCC-SGS/J353, 402-232-4279
- **Multi-Level Security (MLS) Considerations in a "Need to Share" vs a "Need to Know" Net-centric (NC) Environment**
  - Ability to make available differing levels of classified information on the Global Information Grid (GIG)
 - POC: Mr. Ron Sharp, HQ STRAT/J821, 402-294-2918

- **Joint Capability Areas (JCA) – A transformational approach to Combatant Commander Mission success**
  - **Discovery of integration and synchronization techniques of capability based processes, education of capability based strategic thinking, transformation of the current Universal Joint Task List to provide capabilities based options for Combatant Commander decision making**
  - **POC: Mr. J.J. Reich, HQ STRAT/J30, 402-294-2994**
- **Military Deception and its Cost Effectiveness to the Combatant Commander**
  - **Demonstrating to Combatant Commanders the applicability and significance of the use of MILDEC at all levels; Tactical, Operational, and Strategic.**
  - **POC: Mr. Bibey, HQ STRAT/J39, 402-232-7170**
- **Effects of Avian Flu Pandemic on the Global Information Grid**
  - **Having too many users trying to access health information sources, government sties, and new sites create a tipping point that resembles a "Denial of Service" attack.**
  - **POC: Lt Col Tad Fair, HQ STRAT/J7A, 402-294-2303**

- **Strategic Deterrence**
- **Space Operations**
- **Global C2**
- **Global Strike**
- **Information Operations**
- **Integrated Missile Defense**
- **Intelligence, Surveillance, Reconnaissance (ISR)**
- **Combating WMD**
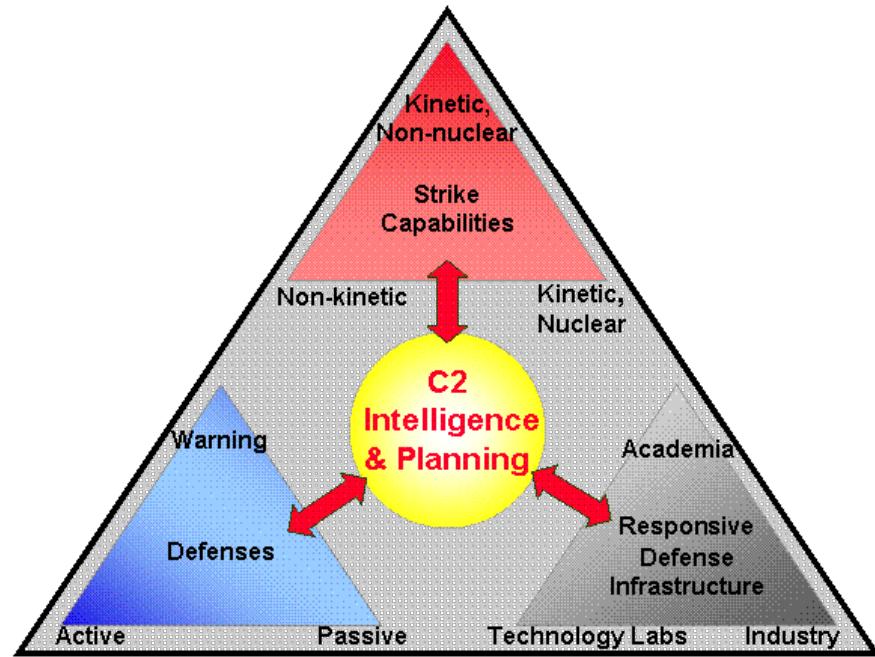
Areas and topics span

Social Science, Physical Science and Operations Research problem sets and techniques

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Analysis Topics - program manager

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Kinetic, Non-nuclear

Strike Capabilities

Non-kinetic

Kinetic, Nuclear

C2 Intelligence & Planning

Warning

Academia

Defenses

Responsive Defense Infrastructure

Active

Passive

Technology Labs

Industry

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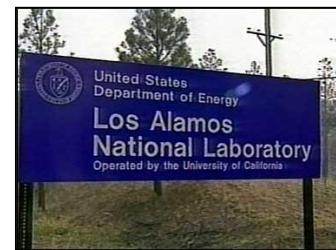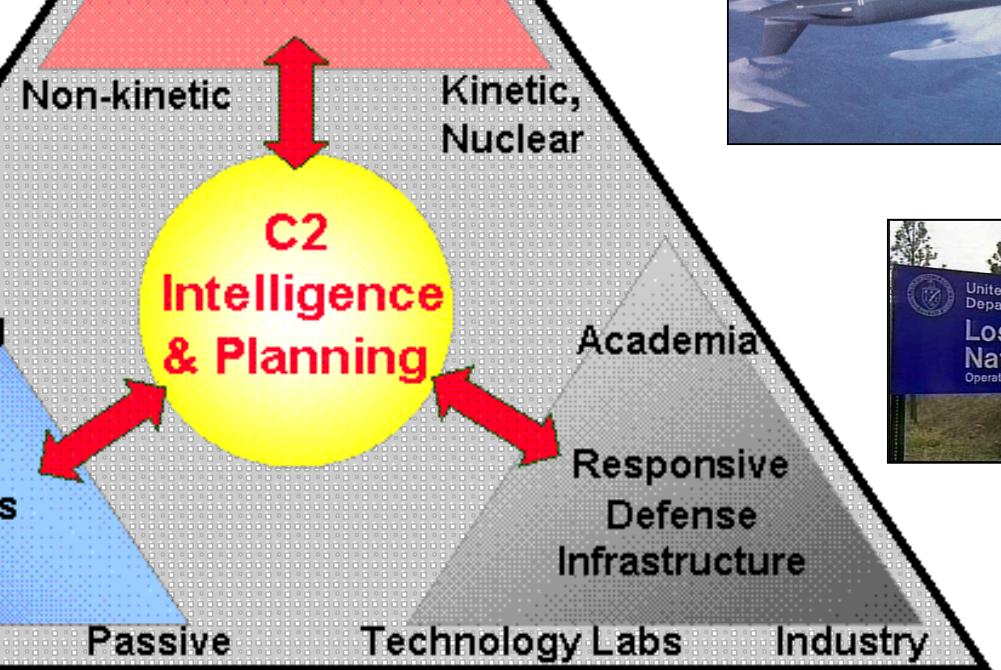
JFCC-SGS (Offutt AFB NE)

- **Global Strike**
  - **Rapid**
  - **Extended range**
  - **Precise**
  - **Kinetic**
  - **Non-kinetic**
- **Integrated planning**
- **Operational execution**

Lt Gen Elder

AOC (Barksdale AFB LA)

- **Global Strike**
  - **Rapid**
  - **Extended range**
  - **Precise**
  - **Kinetic**
  - **Non-kinetic**
- **Integrated planning**
- **Operational execution**

Lt Gen Elder

JFCC-NW (Ft Meade MD)

- **Information Operations**
  - **Computer Network Operations (CNO)**
  - Electronic Warfare (EW)
  - Military Deception (MILDEC)
  - Psychological Operations (PSYOP)
  - Operations Security (OPSEC)
- **Integrate and coordinate**
- **Plan/coordinate trans-regional effects**
- **Command and control**
- **Global advocacy**

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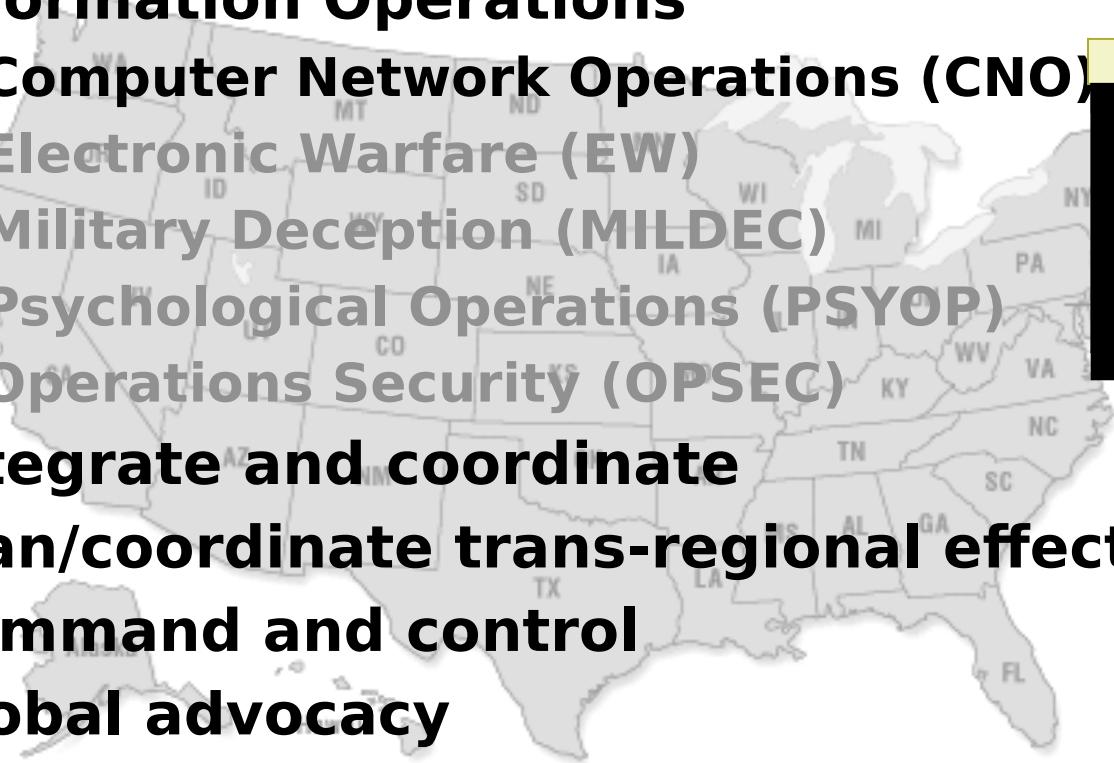
Lt Gen

Information Operations

JIOC (Lackland AFB TX),

- **Information Operations**
  - Computer Network Operations (CNO)
  - Electronic Warfare (EW)
  - Military Deception (MILDEC)
  - Psychological Operations (PSYOP)
  - Operations Security (OPSEC)
- **Integrate and coordinate**
- **Plan/coordinate trans-regional effects**
- **Command and control**
- **Global advocacy**

LTG	Lt Gen

JFCC-ISR (Bolling AFB DC)

- **ISR**
  - **Collection**
  - **Production**
  - **Information to enhance situational/battlespace awareness**
- **Integrate plans and capabilities**
- **Tasking and coordinating**
- **Support strategic force employment**
- **Global ISR campaign planning**
- **Global ISR situational awareness**
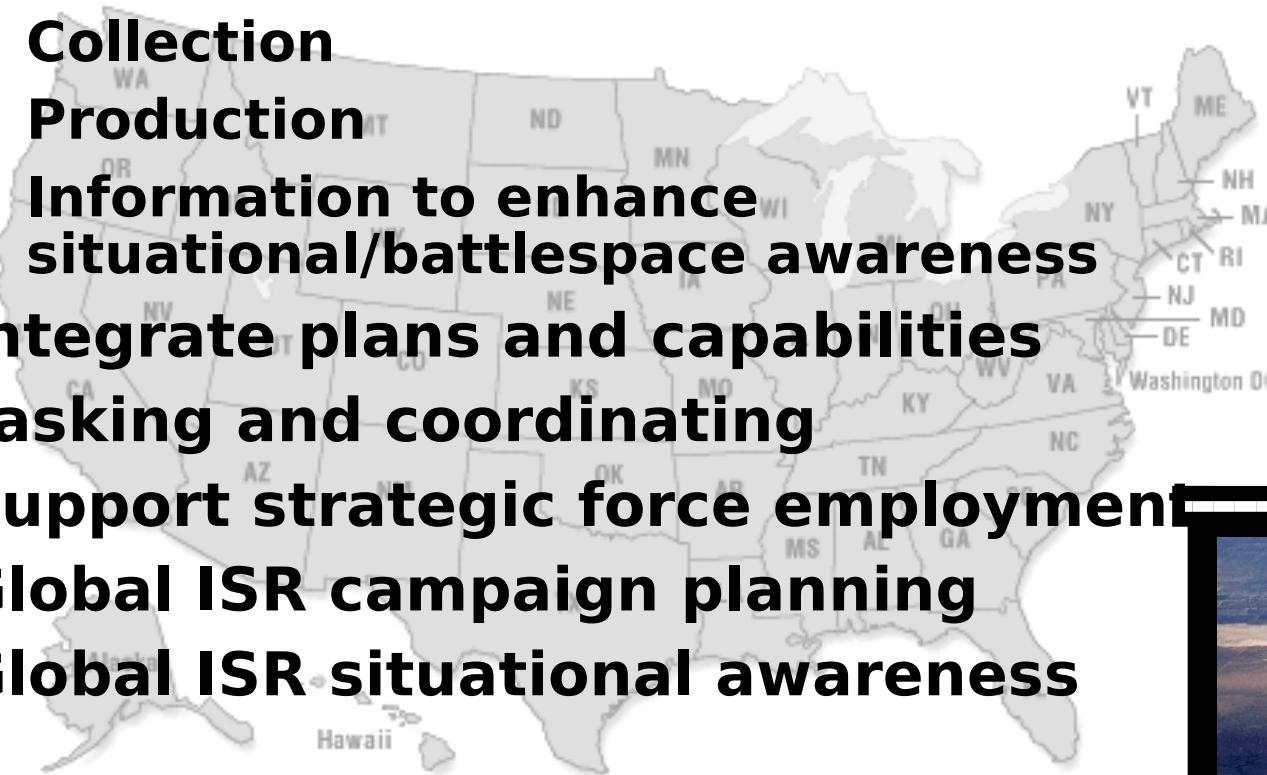
LTG Maples

JFCC-SGS (Offutt AFB NE)

- **Space operations**
  - **Force enhancement**
  - **Space control**
  - **Space support**
  - **Space lift**
  - **On-orbit operations**
  - **Force Application**
- **Plan and conduct operations**
- **Warning/assessment of space attack**
- **Missile warning and space surveillance**
- **Space campaign planning**

Lt Gen Elder

Space Operations

JSpOC (Vandenberg AFB CA)

- **Space operations**
  - **Force enhancement**
  - **Space control**
  - **Space support**
  - **Space lift**
  - **On-orbit operations**
  - **Force Application**
- **Plan and conduct operations**
- **Warning/assessment of space attack**
- **Missile warning and space surveillance**
- **Space campaign planning**

Lt Gen Elder

JFCC-IMD (Shriever AFB CO)

- **Integrated missile defense**
  - **Sensors**
  - **Interceptors**
- **Provide missile attack warning/assessment**
- **Plan integrate and coordinate operations**
- **Operationalize MDA's developmental system**
- **Global Advocacy**

LTG Dodgen

SCC-WMD (Ft Belvoir VA)

- **Combating WMD**
  - **Nonproliferation**
  - **Counterproliferation**
  - **Consequence management**
- **Integrate and synchronize DoD efforts**
- **Initial focus areas**
  - **Interdiction**
  - **Elimination**

Dr Tegnelia

USSTRATCOM (Offutt AFB NE)

- **Command and control**
  - Control and authority
  - Assigned and attached forces
- **Strategic forces**
  - Nuclear
  - Global strike
  - Information operations
  - Missile defense

Gen Cartwright

USSTRATCOM (Offutt AFB NE)

- **Strategic Deterrence**
  - **Strategic nuclear forces**
    - **Strategic bombers**
    - **ICBMs**
    - **SSBNs**
- **Planning**
- **Execution**
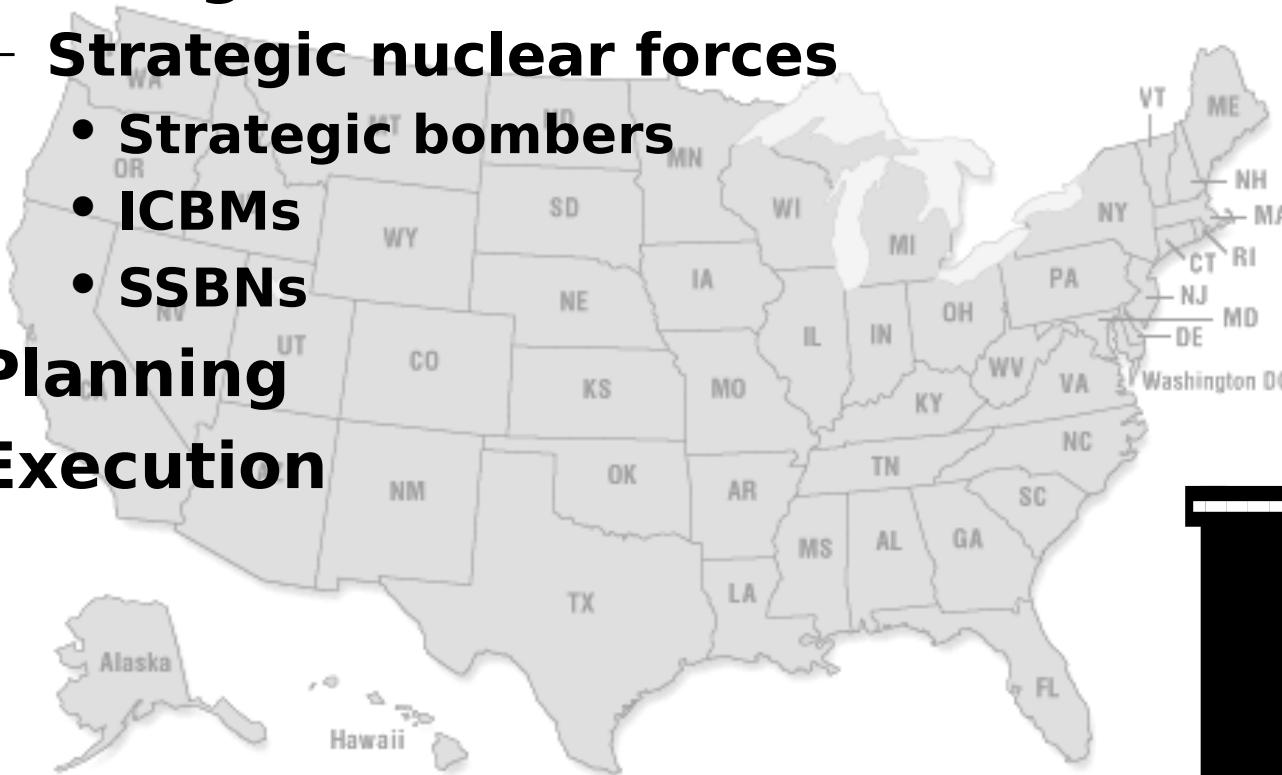
Gen Cartwright
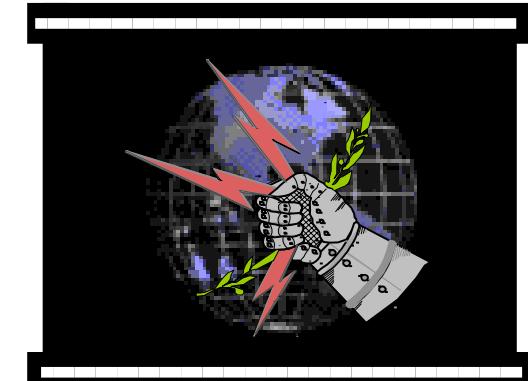
J82 Organization Structure

J82
Future Capabilities
Mr. Spencer

J82A
Deputy
Mr. Gelenter

Cradle to grave future capabilities integration Concepts

- **Experimentation, Science & Technology Integration (ACTD) Oversight)**
- **Analysis**
- **Architectures Integration**
- **CIO Support**
- **JCIDS / SWARF /FCB Interface**

J821 Concepts & Technology Branch
Mr. True / Maj Lindemuth

J822 Analysis Management Branch
Mr. McKenna / Ms. Echternach

J823 Enterprise Management Branch
Mr. Fisher / Lt Col Withee

J824 JCIDS Management Branch
LCDR White / (Vacant)

J825 Experimentation Branch
CDR Haller / Maj Saunders

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                        HQ
                     USSTRATCOM


    USA Forces        USN Forces       USAF Forces      USMC Forces
     (SMDC)            (CFFC)            (AFSPC)          (MCCDC)
     ARSTRAT                            AFSTRAT        MARFORSTRAT


  JFCC-IMD       JFCC-NW        JFCC-SGS        JFCC-ISR       SCC-WMD
  (Missile       (Network       (Space and      (ISR)         (Combating
  Defense)       Warfare)       Global Strike)                 WMD)
Schriever AFB CO Fort Meade MD  Offutt AFB NE  Bolling AFB DC  Fort Belvoir VA


          JTF-GNO                      JIOC
        (Network Ops)              (Information
                                    Operations)
          Arlington VA             Lackland AFB TX
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